J. SULLIVAN.

Cloth-Measuring Machine.

No. 162,973. Patented May 4, 1875.

Fig. 1

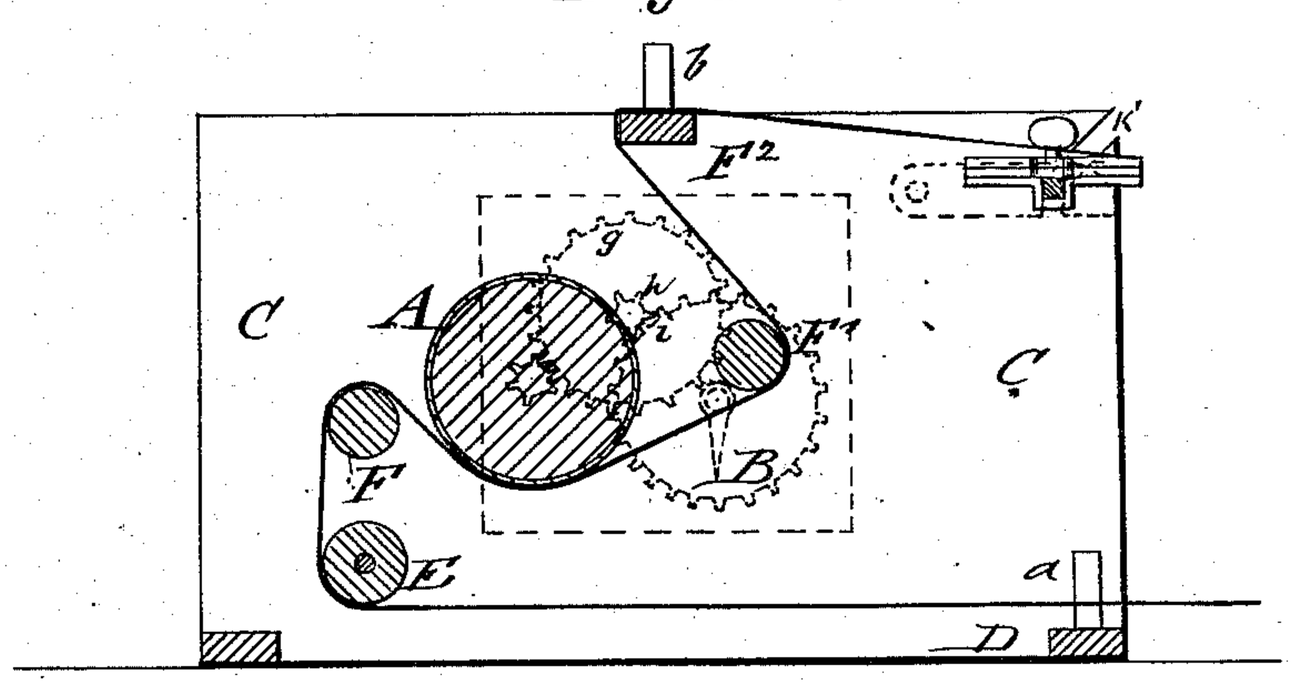
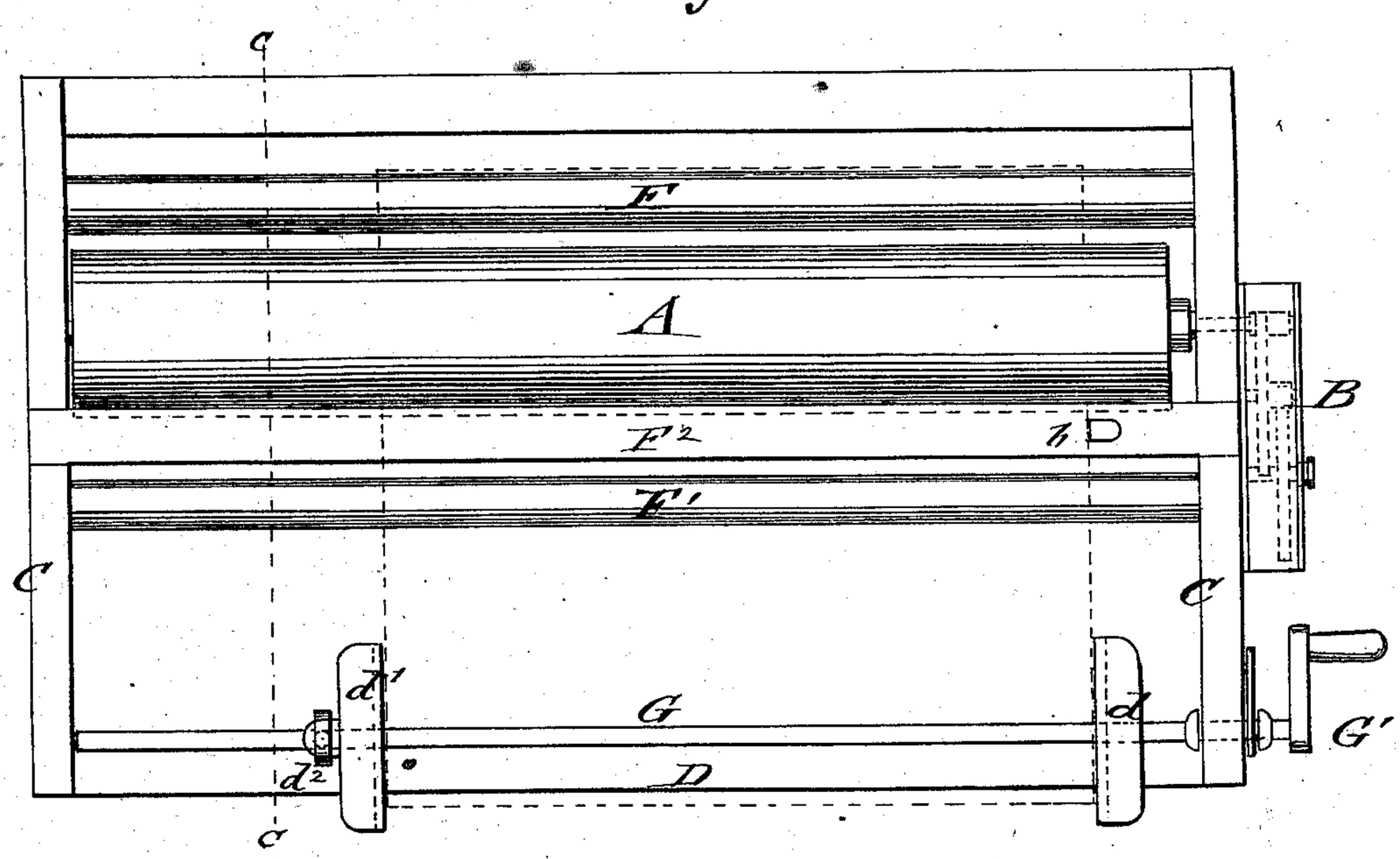


Fig. 2.



WITNESSES:

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JOHN SULLIVAN, OF INDEPENDENCE, MISSOURI.

IMPROVEMENT IN CLOTH-MEASURING MACHINES.

Specification forming part of Letters Patent No. **162,973**, dated May 4, 1875; application filed September 19, 1874.

To all whom it may concern:

Be it known that I, JOHN SULLIVAN, of Independence, in the county of Jackson and State of Missouri, have invented a new and Improved Machine for Measuring and Rolling Cloth, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical transverse section on line *c c*, Fig. 2, of my improved apparatus for measuring and rolling cloth, and Fig. 2 a top view of same.

Similar letters of reference indicate corresponding parts.

The object of my invention is to furnish for manufacturing establishments, dry-goods merchants, and others, an improved apparatus for measuring and rolling cloth, for the purpose of taking up stock in a rapid and convenient manner by one person only, who guides the cloth and operates the machine at the same time.

The invention will first be fully described, and then pointed out in the claim.

In the drawing, A represents the main roller of any suitable size, preferably with a circumference equal to one-half or other even part of a yard, for indicating at two full revolutions one yard on the dial of the registering mechanism B connected to the shaft of roller A. Roller A turns in bearings of side standards or frame *c*, which is placed on the table or counter, the cloth to be measured and rolled being introduced at the front part over the lateral rod D with side-projecting guide-lug *a*, passing then over a roller, E, back of the measuring-roller to a stationary tension-rod, F, and then over the same and under the measuring-roller A, either directly to the revolving crank-rod G at the upper front part of the frame C, or over additional tension-rods F^1 and F^2, having a guide-lug, *b*, applied to the same, according as the rolling of the goods on the folding-board is desired to be of lesser or greater tension.

The front revolving-rod G is operated by a crank, G^1, with one hand, for rolling up the cloth, while the goods are fed and guided to the measuring-roller with the other hand. The friction of the cloth on passing over the roller causes the turning of the same and thereby the registering of the length of the goods by the indicating mechanism B. The crank-rod G is made of smooth, round, or square shape, and attached to the frame in such a manner that it may be readily taken off for removing the rolls of cloth and then replaced.

A single machine may be provided with a number of these rods and clamps, so that the attendant may fold or roll a number of pieces of cloth, and lay them to one side until they can be inspected, and if a question should arise in regard to the measurement of a piece, it is all ready to be put in the machine, and pulled backward by hand over the measuring and tension-rollers, in order to test the accuracy of the first measurement.

In previous machines of this class it is customary to support the winding board between clutches arranged at opposite sides of the machine, and not connected with each other, and said board must be strong enough to resist a very heavy strain in case a long, heavy piece of goods is to be wound upon it, as it must not only support the weight of the bolt of cloth, but also resist the endwise pressure of the clutches which is necessary to hold it in place. Thus, for large bolts of goods, a very bulky board must be used, which is objectionable for obvious reasons.

With my improvement, it will be seen that a very light board, or even a piece of pasteboard, may be used for winding the heaviest bolt of cloth, as the rod supports the whole weight, and only sufficient endwise pressure upon the winding-board to support its own weight at the start is required.

A stationary side-clamping piece, *d*, corresponds with the guide-lug *a b*, and serves, in connection with a sliding clamp-piece, d^1, to hold the folding-board firmly attached to the crank-rod for such goods which have to be rolled on boards. The sliding clamp piece d^1 is firmly fastened to the crank-rod, and set to the width of cloth by a set-screw, d^2, to be released and slipped off the crank-rod for taking off the rolled piece.

When rolling goods which require no folding-board the sliding clamp-piece is detached, the machine being thus readily used for rolling goods with or without a folding-board, re-

quiring only one person to attend to it, and facilitating and accelerating the process of measuring and rolling cloth to a considerable extent.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a cloth measure and roller, the removable winding-rod G, having thereupon the winding-board clutches *d* and *d'*, substantially as and for the purpose set forth.

JOHN SULLIVAN.

Witnesses:

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